WTCI-710-LERA

DB06

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Index to drawing book 5

Include work order no. and floor no. if applicable

Roll # (e.g., CORR-4): DB06	Doc. ID (report #, dwg. #):	
Document Date:	**Document Author Name:**	**Author Organization:**

KEYWORDS – HIGHLIGHT ALL THAT APPLY

Level 1

Bankers Trust	Project 6	WTC 4 - South Plaza Bldg.
Concourse	Project 7	WTC 5 - North Plaza Bldg.
Electrical Substation	Project 8	WTC 6 - Customs House
Liberty Plaza	WFC 1 - Oppenhiemer Dow	WTC 7
PATH Station	WFC 2 - Tower B	WTC Complex
Project 1	WFC 3 - American Express	WTC Plaza
Project 2	WFC 4 - Tower D	
Project 3	WTC 1 - North Tower	Add
Project 4	WTC 2 - South Tower	
Project 5	WTC 3 - Marriot Hotel	

Level 2

Accident analysis & risk	Fire protection	Police	Add
Architectural	Fire service	Security	
Data request	Management	Structural	
Emergency management	Mech./elec.	Tenant alterations	
Evacuation	News coverage		

Level 3

1993 explosion	Deflection	Human comfort	Smoke control
A/E fitout	Demolition	HVAC	Smoke test
A-242	Design	Index	Spandrel beam
A-36	Detailing	Inspection	Specifications Splices
A-497	Doors	Insulation	Sprinkler
Air cooled condensers	Drawings	Job number	Stability
Analysis	Eastern States Steel	Joist	Stairways
Angles	Egress	L-50	Standards
Antenna	Elevator	Lighting	Steel
Artifacts	Emergency communications	Loads	Steel composition
Asbestos	Equipment	Maintenance	Stiffness
Beams	Erection marks	Marking	Structural review
Bow tie	Escalator	Mesh reinforcement	Survivor
Bracing	Expansion joint	Mill inspection	Tenant list
Bridging truss	Exterior columns	Model	Testing
Calculations	Fabrication	Mullion	Tie
Carpet	Family member	Operations	Tolerances
Ceilings	Field survey	Paint	Triad
Certification	Fire alarms	Partition layout	Truss
Chillers	Fireproofing	Photos	Vestibule
Cladding	Fire spread	Pipes	Vibration
Collapse	Flammability	Plumbing	Walls
Columns	Floor	Probability, uncertainty	Water supply
Communication systems	Floor load	Quality control	Weather
Composite truss	Floor slab	Reinforcing (strengthening)	Weight
Computer output	Floor system	Renovation	Weld detail
Computer program	Floor trusses	Repair	Weld size
Concrete	Foundations	Research & Development	Welding
Connections	Fracture	Roof	Wind
Construction	Frame	Safety	Windows
Contract	Frame analysis	Schedule	Yield strength
Core beams	Frequency	Sculpture	
Core columns	Fuel	Security system	Add
Cranes	Furniture layout	Shear knuckle	
Criteria	H Generators	Shear test	
Dampers	Guidelines	Shop drawings	
Debris	Gypsum board	Shortening	
Deck	Hat truss	Slurry wall	

WTCI-710-LERA

WORTHINGTON, SKILLING, HELLE & JACKSON — Civil & Structural Engineers

PROJECT THE WORLD TRADE CENTER | TITLE DRAWING BOOK 5 | DATE

REVISIONS

5-AB1- ≠ 5-B1-
Beam Schedules

5-AB2-
Beam Types
(See 5-AB2-0 for index)

5-AB3-
Stud Details
(See 5-AB3-1 for index)

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710-L

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 11/26/71

REVISIONS

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5-AB1-	1	1/22/68	5-AB1-	51	11/22/68	5-AB1-101		7/20/67	5-AB1-151	10/22/68	5-AB1-201	12/ 6/68
5-AB1-	2	1/22/68	5-AB1-	52	1/22/68	5-AB1-102		1/22/68	5-AB1-152	1/10/69	5-AB1-202	12/ 6/68
5-AB1-	3	7/17/68	5-AB1-	53	1/22/68	5-AB1-103		1/22/68	5-AB1-153	1/22/68	5-AB1-203	7/17/68
5-AB1-	4	7/17/68	5-AB1-	54	1/22/68	5-AB1-104		2/21/68	5-AB1-154	12/ 6/68	5-AB1-204	7/17/68
5-AB1-	5	10/ 9/68	5-AB1-	55	1/22/68	5-AB1-105		9/25/68	5-AB1-155	12/ 6/68	5-AB1-205	7/17/68
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5-AB1-	8	1/22/68	5-AB1-	58	3/13/68	5-AB1-108		9/25/68	5-AB1-158	1/22/68	5-AB1-208	10/18/68
5-AB1-	9	10/ 9/68	5-AB1-	59	7/11/69	5-AB1-109		9/25/68	5-AB1-159	12/ 6/68	5-AB1-209	11/27/68
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5-AB1-	15	1/22/68	5-AB1-	65	8/15/69	5-AB1-115		1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68
5-AB1-	16	1/22/68	5-AB1-	66	1/22/68	5-AB1-116		12/ 6/68	5-AB1-166	11/22/68	5-AB1-216	1/22/68
5-AB1-	17	8/17/68	5-AB1-	67	8/15/69	5-AB1-117		1/22/68	5-AB1-167	12/ 6/68	5-AB1-217	1/22/68
5-AB1-	18	10/ 7/68	5-AB1-	68	8/15/69	5-AB1-118		10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68
5-AB1-	19	12/ 6/68	5-AB1-	69	8/15/69	5-AB1-119		1/10/69	5-AB1-169	12/ 6/68	5-AB1-219	7/17/68
5-AB1-	20	7/17/68	5-AB1-	70	10/ 9/68	5-AB1-120		1/10/69	5-AB1-170	10/18/68	5-AB1-220	9/18/68
5-AB1-	21	12/ 6/68	5-AB1-	71	9/30/69	5-AB1-121		1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	10/18/68
5-AB1-	22	12/ 6/68	5-AB1-	72	9/30/69	5-AB1-122		1/22/68	5-AB1-172	12/ 6/68	~~5-AB1-222~~	~~9/18/68~~
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5-AB1-	43	1/22/68	5-AB1-	93	1/22/68	5-AB1-143		2/29/68	5-AB1-193	12/ 6/68		
5-AB1-	44	1/24/68	5-AB1-	94	7/17/68	5-AB1-144		9/25/68	5-AB1-194	12/ 6/68		
5-AB1-	45	1/22/68	5-AB1-	95	1/22/68	5-AB1-145		9/25/68	5-AB1-195	12/ 6/68		
5-AB1-	46	11/22/68	5-AB1-	96	1/22/68	5-AB1-146		1/22/68	5-AB1-196	12/ 6/68		

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 10/ 1/69

REVISIONS

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5-AB1-	48	1/22/68	5-AB1-	98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	12/ 6/68						

LESLIE E. ROBERTSON — REGISTERED PROFESSIONAL ENGINEER — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 9/ 2/69

REVISIONS

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5-AB1- 7	11/21/67	5-AB1- 57	7/17/68	5-AB1-107	2/21/68	5-AB1-157	9/15/67	5-AB1-207	8/17/68		
5-AB1- 8	1/22/68	5-AB1- 58	3/13/68	5-AB1-108	9/25/68	5-AB1-158	1/22/68	5-AB1-208	2/12/68		
5-AB1- 9	10/ 9/68	5-AB1- 59	7/11/69	5-AB1-109	9/25/68	5-AB1-159	12/ 6/68	5-AB1-209	11/27/68		
5-AB1- 10	1/22/68	5-AB1- 60	7/17/68	5-AB1-110	3/29/68	5-AB1-160	10/22/68	5-AB1-210	9/27/68		
5-AB1- 11	1/22/68	5-AB1- 61	8/15/69	5-AB1-111	11/22/68	5-AB1-161	7/17/68	5-AB1-211	1/22/68		
5-AB1- 12	1/22/68	5-AB1- 62	8/15/69	5-AB1-112	9/27/68	5-AB1-162	1/10/69	5-AB1-212	1/22/68		
5-AB1- 13	12/ 6/68	5-AB1- 63	1/22/68	5-AB1-113	1/22/68	5-AB1-163	11/22/68	5-AB1-213	1/22/68		
5-AB1- 14	12/ 6/68	5-AB1- 64	1/22/68	5-AB1-114	12/ 6/68	5-AB1-164	1/22/68	5-AB1-214	1/22/68		
5-AB1- 15	1/22/68	5-AB1- 65	8/15/69	5-AB1-115	1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68		
5-AB1- 16	1/22/68	5-AB1- 66	1/22/68	5-AB1-116	12/ 6/68	5-AB1-166	11/22/68	5-AB1-216	1/22/68		
5-AB1- 17	8/17/68	5-AB1- 67	8/15/69	5-AB1-117	1/22/68	5-AB1-167	12/ 6/68	5-AB1-217	1/22/68		
5-AB1- 18	10/ 7/68	5-AB1- 68	8/15/69	5-AB1-118	10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68		
5-AB1- 19	12/ 6/68	5-AB1- 69	8/15/69	5-AB1-119	1/10/69	5-AB1-169	12/ 6/68	5-AB1-219	7/17/68		
5-AB1- 20	7/17/68	5-AB1- 70	10/ 9/68	5-AB1-120	1/10/69	5-AB1-170	1/22/68	5-AB1-220	9/18/68		
5-AB1- 21	12/ 6/68	5-AB1- 71	3/21/69	5-AB1-121	1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	9/18/68		
5-AB1- 22	12/ 6/68	5-AB1- 72	7/11/69	5-AB1-122	1/22/68	5-AB1-172	12/ 6/68	5-AB1-222	9/18/68		
5-AB1- 23	1/22/68	5-AB1- 73	7/11/69	5-AB1-123	7/11/69	5-AB1-173	12/ 6/68	5-AB1-241	11/27/68		
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5-AB1- 28	1/10/69	5-AB1- 78	12/ 6/68	5-AB1-128	2/12/68	5-AB1-178	7/17/68				
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5-AB1- 30	4/17/68	5-AB1- 80	1/22/68	5-AB1-130	1/22/68	5-AB1-180	7/20/67				
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5-AB1- 42	1/22/68	5-AB1- 92	8/15/69	5-AB1-142	1/24/68	5-AB1-192	12/ 6/68				
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SKILLING-HELLE-CHRISTIANSEN-ROBERTSON — Civil & Structural Engineers — Printed

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 7/ 1/69

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5-AB1- 18	10/ 7/68	5-AB1- 68	1/22/68	5-AB1-118	10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68
5-AB1- 19	12/ 6/68	5-AB1- 69	11/22/68	5-AB1-119	1/10/69	5-AB1-169	12/ 6/68	5-AB1-219	7/17/68
5-AB1- 20	7/17/68	5-AB1- 70	10/ 9/68	5-AB1-120	1/10/69	5-AB1-170	1/22/68	5-AB1-220	9/18/68
5-AB1- 21	12/ 6/68	5-AB1- 71	3/21/69	5-AB1-121	1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	9/18/68
5-AB1- 22	12/ 6/68	5-AB1- 72	9/25/68	5-AB1-122	1/22/68	5-AB1-172	12/ 6/68	5-AB1-222	9/18/68
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REVISIONS

Revised 5-1-69

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5-AB1- 38	12/ 6/68	5-AB1- 88	1/22/68	5-AB1-138	1/24/68	5-AB1-188	12/ 6/68					
5-AB1- 39	12/ 6/68	5-AB1- 89	7/17/68	5-AB1-139	1/24/68	5-AB1-189	12/ 6/68					
5-AB1- 40	1/24/68	5-AB1- 90	1/22/68	5-AB1-140	3/21/69	5-AB1-190	12/ 6/68					
5-AB1- 41	1/22/68	5-AB1- 91	1/22/68	5-AB1-141	12/ 6/68	5-AB1-191	12/ 6/68					
5-AB1- 42	1/22/68	5-AB1- 92	7/17/68	5-AB1-142	1/24/68	5-AB1-192	3/21/69					
5-AB1- 43	1/22/68	5-AB1- 93	1/22/68	5-AB1-143	2/29/68	5-AB1-193	12/ 6/68					
5-AB1- 44	1/24/68	5-AB1- 94	7/17/68	5-AB1-144	9/25/68	5-AB1-194	12/ 6/68					
5-AB1- 45	1/22/68	5-AB1- 95	1/22/68	5-AB1-145	9/25/68	5-AB1-195	12/ 6/68					
5-AB1- 46	11/22/68	5-AB1- 96	1/22/68	5-AB1-146	1/22/68	5-AB1-196	12/ 6/68					
5-AB1- 47	1/22/68	5-AB1- 97	1/22/68	5-AB1-147	1/22/68	5-AB1-197	12/ 6/68					
5-AB1- 48	1/22/68	5-AB1- 98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	12/ 6/68					
5-AB1- 49	1/22/68	5-AB1- 99	1/22/68	5-AB1-149	12/21/67	5-AB1-199	2/ 9/68					

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 3430 — UNIVERSITY OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE HORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 4/ 1/69

REVISIONS

5-AB1- 0	11/ 9/67	5-AB1- 50	1/22/68	5-AB1-100	1/22/68	5-AB1-150	12/ 6/68	5-AB1-200	12/ 6/68		
5-AB1- 1	1/22/68	5-AB1- 51	11/22/68	5-AB1-101	7/20/67	5-AB1-151	10/22/68	5-AB1-201	12/ 6/68		
5-AB1- 2	1/22/68	5-AB1- 52	1/22/68	5-AB1-102	1/22/68	5-AB1-152	1/10/69	5-AB1-202	12/ 6/68		
5-AB1- 3	3/21/69	5-AB1- 53	1/22/68	5-AB1-103	1/22/68	5-AB1-153	1/22/68	5-AB1-203	7/17/68		
5-AB1- 4	3/21/69	5-AB1- 54	1/22/68	5-AB1-104	2/21/68	5-AB1-154	12/ 6/68	5-AB1-204	7/17/68		
5-AB1- 5	10/ 9/68	5-AB1- 55	1/22/68	5-AB1-105	9/25/68	5-AB1-155	12/ 6/68	5-AB1-205	7/17/68		
5-AB1- 6	1/22/68	5-AB1- 56	7/17/68	5-AB1-106	1/22/68	5-AB1-156	1/22/68	5-AB1-206	3/11/68		
5-AB1- 7	11/21/67	5-AB1- 57	7/17/68	5-AB1-107	2/21/68	5-AB1-157	9/15/67	5-AB1-207	8/17/68		
5-AB1- 8	1/22/68	5-AB1- 58	3/13/68	5-AB1-108	9/25/68	5-AB1-158	1/22/68	5-AB1-208	2/12/68		
5-AB1- 9	10/ 9/68	5-AB1- 59	1/22/68	5-AB1-109	9/25/68	5-AB1-159	12/ 6/68	5-AB1-209	11/27/68		
5-AB1- 10	1/22/68	5-AB1- 60	7/17/68	5-AB1-110	3/29/68	5-AB1-160	10/22/68	5-AB1-210	9/27/68		
5-AB1- 11	1/22/68	5-AB1- 61	12/ 6/68	5-AB1-111	11/22/68	5-AB1-161	7/17/68	5-AB1-211	1/22/68		
5-AB1- 12	1/22/68	5-AB1- 62	1/22/68	5-AB1-112	9/27/68	5-AB1-162	1/10/69	5-AB1-212	1/22/68		
5-AB1- 13	12/ 6/68	5-AB1- 63	1/22/68	5-AB1-113	1/22/68	5-AB1-163	11/22/68	5-AB1-213	1/22/68		
5-AB1- 14	12/ 6/68	5-AB1- 64	1/22/68	5-AB1-114	12/ 6/68	5-AB1-164	1/22/68	5-AB1-214	1/22/68		
5-AB1- 15	1/22/68	5-AB1- 65	1/22/68	5-AB1-115	1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68		
5-AB1- 16	1/22/68	5-AB1- 66	1/22/68	5-AB1-116	12/ 6/68	5-AB1-166	11/22/68	5-AB1-216	1/22/68		
5-AB1- 17	8/17/68	5-AB1- 67	3/21/69	5-AB1-117	1/22/68	5-AB1-167	12/ 6/68	5-AB1-217	1/22/68		
5-AB1- 18	10/ 7/68	5-AB1- 68	1/22/68	5-AB1-118	10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68		
5-AB1- 19	12/ 6/68	5-AB1- 69	11/22/68	5-AB1-119	1/10/69	5-AB1-169	12/ 6/68	5-AB1-219	8/17/68		
5-AB1- 20	7/17/68	5-AB1- 70	10/ 9/68	5-AB1-120	1/10/69	5-AB1-170	1/22/68	5-AB1-220	9/18/68		
5-AB1- 21	12/ 6/68	5-AB1- 71	3/21/69	5-AB1-121	1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	9/18/68		
5-AB1- 22	12/ 6/68	5-AB1- 72	9/25/68	5-AB1-122	1/22/68	5-AB1-172	12/ 6/68	5-AB1-222	9/18/68		
5-AB1- 23	1/22/68	5-AB1- 73	1/22/68	5-AB1-123	1/22/68	5-AB1-173	12/ 6/68	5-AB1-241	3/21/69		
5-AB1- 24	1/22/68	5-AB1- 74	1/22/68	5-AB1-124	1/22/68	5-AB1-174	12/ 6/68	5-AB1-242	3/21/69		
5-AB1- 25	1/22/68	5-AB1- 75	1/22/68	5-AB1-125	2/12/68	5-AB1-175	7/17/68				
5-AB1- 26	1/22/68	5-AB1- 76	1/22/68	5-AB1-126	1/22/68	5-AB1-176	1/22/68				
5-AB1- 27	4/17/68	5-AB1- 77	7/17/68	5-AB1-127	1/22/68	5-AB1-177	7/17/68				
5-AB1- 28	1/10/69	5-AB1- 78	12/ 6/68	5-AB1-128	2/12/68	5-AB1-178	7/17/68				
5-AB1- 29	4/17/68	5-AB1- 79	1/22/68	5-AB1-129	2/12/68	5-AB1-179	7/17/68				
5-AB1- 30	4/17/68	5-AB1- 80	1/22/68	5-AB1-130	1/22/68	5-AB1-180	7/20/67				
5-AB1- 31	1/22/68	5-AB1- 81	1/22/68	5-AB1-131	3/13/68	5-AB1-181	12/ 6/68				
5-AB1- 32	9/25/68	5-AB1- 82	1/22/68	5-AB1-132	1/22/68	5-AB1-182	12/ 6/68				
5-AB1- 33	4/17/68	5-AB1- 83	1/22/68	5-AB1-133	7/17/68	5-AB1-183	12/ 6/68				
5-AB1- 34	3/29/68	5-AB1- 84	1/22/68	5-AB1-134	7/17/68	5-AB1-184	12/ 6/68				
5-AB1- 35	1/10/69	5-AB1- 85	1/22/68	5-AB1-135	1/22/68	5-AB1-185	3/11/68				
5-AB1- 36	1/10/69	5-AB1- 86	12/ 6/68	5-AB1-136	11/17/67	5-AB1-186	12/ 6/68				
5-AB1- 37	1/24/68	5-AB1- 87	1/22/68	5-AB1-137	7/17/68	5-AB1-187	3/11/68				
5-AB1- 38	12/ 6/68	5-AB1- 88	1/22/68	5-AB1-138	1/24/68	5-AB1-188	12/ 6/68				
5-AB1- 39	12/ 6/68	5-AB1- 89	7/17/68	5-AB1-139	1/24/68	5-AB1-189	12/ 6/68				
5-AB1- 40	1/24/68	5-AB1- 90	1/22/68	5-AB1-140	3/21/69	5-AB1-190	12/ 6/68				
5-AB1- 41	1/22/68	5-AB1- 91	1/22/68	5-AB1-141	12/ 6/68	5-AB1-191	12/ 6/68				
5-AB1- 42	1/22/68	5-AB1- 92	7/17/68	5-AB1-142	1/24/68	5-AB1-192	3/21/69				
5-AB1- 43	1/22/68	5-AB1- 93	1/22/68	5-AB1-143	2/29/68	5-AB1-193	12/ 6/68				
5-AB1- 44	1/24/68	5-AB1- 94	7/17/68	5-AB1-144	9/25/68	5-AB1-194	12/ 6/68				
5-AB1- 45	1/22/68	5-AB1- 95	1/22/68	5-AB1-145	9/25/68	5-AB1-195	12/ 6/68				
5-AB1- 46	11/22/68	5-AB1- 96	1/22/68	5-AB1-146	1/22/68	5-AB1-196	12/ 6/68				
5-AB1- 47	1/22/68	5-AB1- 97	1/22/68	5-AB1-147	1/22/68	5-AB1-197	12/ 6/68				
5-AB1- 48	1/22/68	5-AB1- 98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	12/ 6/68				
5-AB1- 49	1/22/68	5-AB1- 99	1/22/68	5-AB1-149	12/21/67	5-AB1-199	2/ 9/68				

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 3436 — UNIVERSITY OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 3/ 3/69

REVISIONS

5-AB1-	0	11/ 9/67	5-AB1-	50	1/22/68	5-AB1-100	1/22/68	5-AB1-150	12/ 6/68	5-AB1-200	12/ 6/68		
5-AB1-	1	1/22/68	5-AB1-	51	11/22/68	5-AB1-101	7/20/67	5-AB1-151	10/22/68	5-AB1-201	12/ 6/68		
5-AB1-	2	1/22/68	5-AB1-	52	1/22/68	5-AB1-102	1/22/68	5-AB1-152	1/10/69	5-AB1-202	12/ 6/68		
5-AB1-	3	7/17/68	5-AB1-	53	1/22/68	5-AB1-103	1/22/68	5-AB1-153	1/22/68	5-AB1-203	7/17/68		
5-AB1-	4	7/17/68	5-AB1-	54	1/22/68	5-AB1-104	2/21/68	5-AB1-154	12/ 6/68	5-AB1-204	7/17/68		
5-AB1-	5	10/ 9/68	5-AB1-	55	1/22/68	5-AB1-105	9/25/68	5-AB1-155	12/ 6/68	5-AB1-205	7/17/68		
5-AB1-	6	1/22/68	5-AB1-	56	7/17/68	5-AB1-106	1/22/68	5-AB1-156	1/22/68	5-AB1-206	3/11/68		
5-AB1-	7	11/21/67	5-AB1-	57	7/17/68	5-AB1-107	2/21/68	5-AB1-157	9/15/67	5-AB1-207	8/17/68		
5-AB1-	8	1/22/68	5-AB1-	58	3/13/68	5-AB1-108	9/25/68	5-AB1-158	1/22/68	5-AB1-208	2/12/68		
5-AB1-	9	10/ 9/68	5-AB1-	59	1/22/68	5-AB1-109	9/25/68	5-AB1-159	12/ 6/68	5-AB1-209	11/27/68		
5-AB1-	10	1/22/68	5-AB1-	60	7/17/68	5-AB1-110	3/29/68	5-AB1-160	10/22/68	5-AB1-210	9/27/68		
5-AB1-	11	1/22/68	5-AB1-	61	12/ 6/68	5-AB1-111	11/22/68	5-AB1-161	7/17/68	5-AB1-211	1/22/68		
5-AB1-	12	1/22/68	5-AB1-	62	1/22/68	5-AB1-112	9/27/68	5-AB1-162	1/10/69	5-AB1-212	1/22/68		
5-AB1-	13	12/ 6/68	5-AB1-	63	1/22/68	5-AB1-113	1/22/68	5-AB1-163	11/22/68	5-AB1-213	1/22/68		
5-AB1-	14	12/ 6/68	5-AB1-	64	1/22/68	5-AB1-114	12/ 6/68	5-AB1-164	1/22/68	5-AB1-214	1/22/68		
5-AB1-	15	1/22/68	5-AB1-	65	1/22/68	5-AB1-115	1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68		
5-AB1-	16	1/22/68	5-AB1-	66	1/22/68	5-AB1-116	12/ 6/68	5-AB1-166	11/22/68	5-AB1-216	1/22/68		
5-AB1-	17	6/17/68	5-AB1-	67	9/27/68	5-AB1-117	1/22/68	5-AB1-167	12/ 6/68	5-AB1-217	1/22/68		
5-AB1-	18	10/ 7/68	5-AB1-	68	1/22/68	5-AB1-118	10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68		
5-AB1-	19	12/ 6/68	5-AB1-	69	11/22/68	5-AB1-119	1/10/69	5-AB1-169	12/ 6/68	5-AB1-219	8/17/68		
5-AB1-	20	7/17/68	5-AB1-	70	10/ 9/68	5-AB1-120	1/10/69	5-AB1-170	1/22/68	5-AB1-220	9/18/68		
5-AB1-	21	12/ 6/68	5-AB1-	71	1/22/68	5-AB1-121	1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	9/18/68		
5-AB1-	22	12/ 6/68	5-AB1-	72	9/25/68	5-AB1-122	1/22/68	5-AB1-172	12/ 6/68	5-AB1-222	9/18/68		
5-AB1-	23	1/22/68	5-AB1-	73	1/22/68	5-AB1-123	1/22/68	5-AB1-173	12/ 6/68	5-AB1-241	11/27/68		
5-AB1-	24	1/22/68	5-AB1-	74	1/22/68	5-AB1-124	1/22/68	5-AB1-174	12/ 6/68	5-AB1-242	1/10/69		
5-AB1-	25	1/22/68	5-AB1-	75	1/22/68	5-AB1-125	2/12/68	5-AB1-175	7/17/68				
5-AB1-	26	1/22/68	5-AB1-	76	1/22/68	5-AB1-126	1/22/68	5-AB1-176	1/22/68				
5-AB1-	27	4/17/68	5-AB1-	77	7/17/68	5-AB1-127	1/22/68	5-AB1-177	7/17/68				
5-AB1-	28	1/10/69	5-AB1-	78	12/ 6/68	5-AB1-128	2/12/68	5-AB1-178	7/17/68				
5-AB1-	29	4/17/68	5-AB1-	79	1/22/68	5-AB1-129	2/12/68	5-AB1-179	7/17/68				
5-AB1-	30	4/17/68	5-AB1-	80	1/22/68	5-AB1-130	1/22/68	5-AB1-180	7/20/67				
5-AB1-	31	1/22/68	5-AB1-	81	1/22/68	5-AB1-131	3/13/68	5-AB1-181	12/ 6/68				
5-AB1-	32	9/25/68	5-AB1-	82	1/22/68	5-AB1-132	1/22/68	5-AB1-182	12/ 6/68				
5-AB1-	33	4/17/68	5-AB1-	83	1/22/68	5-AB1-133	7/17/68	5-AB1-183	12/ 6/68				
5-AB1-	34	3/29/68	5-AB1-	84	1/22/68	5-AB1-134	7/17/68	5-AB1-184	12/ 6/68				
5-AB1-	35	1/10/69	5-AB1-	85	1/22/68	5-AB1-135	1/22/68	5-AB1-185	3/11/68				
5-AB1-	36	1/10/69	5-AB1-	86	12/ 6/68	5-AB1-136	11/17/67	5-AB1-186	12/ 6/68				
5-AB1-	37	1/24/68	5-AB1-	87	1/22/68	5-AB1-137	7/17/68	5-AB1-187	3/11/68				
5-AB1-	38	12/ 6/68	5-AB1-	88	1/22/68	5-AB1-138	1/24/68	5-AB1-188	12/ 6/68				
5-AB1-	39	12/ 6/68	5-AB1-	89	7/17/68	5-AB1-139	1/24/68	5-AB1-189	12/ 6/68				
5-AB1-	40	1/24/68	5-AB1-	90	1/22/68	5-AB1-140	11/22/68	5-AB1-190	12/ 6/68				
5-AB1-	41	1/22/68	5-AB1-	91	1/22/68	5-AB1-141	12/ 6/68	5-AB1-191	12/ 6/68				
5-AB1-	42	1/22/68	5-AB1-	92	7/17/68	5-AB1-142	1/24/68	5-AB1-192	12/ 6/68				
5-AB1-	43	1/22/68	5-AB1-	93	1/22/68	5-AB1-143	2/29/68	5-AB1-193	12/ 6/68				
5-AB1-	44	1/24/68	5-AB1-	94	7/17/68	5-AB1-144	9/25/68	5-AB1-194	12/ 6/68				
5-AB1-	45	1/22/68	5-AB1-	95	1/22/68	5-AB1-145	9/25/68	5-AB1-195	12/ 6/68				
5-AB1-	46	11/22/68	5-AB1-	96	1/22/68	5-AB1-146	1/22/68	5-AB1-196	12/ 6/68				
5-AB1-	47	1/22/68	5-AB1-	97	1/22/68	5-AB1-147	1/22/68	5-AB1-197	12/ 6/68				
5-AB1-	48	1/22/68	5-AB1-	98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	12/ 6/68				
5-AB1-	49	1/22/68	5-AB1-	99	1/22/68	5-AB1-149	12/21/67	5-AB1-199	2/ 9/68				

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 2/ 3/69

DIVISIONS

5-AB1- 0	11/ 9/67	5-AB1- 50	1/22/68	5-AB1-100	1/22/68	5-AB1-150	12/ 6/68	5-AB1-200	12/ 6/68
5-AB1- 1	1/22/68	5-AB1- 51	11/22/68	5-AB1-101	7/20/67	5-AB1-151	10/22/68	5-AB1-201	12/ 6/68
5-AB1- 2	1/22/68	5-AB1- 52	1/22/68	5-AB1-102	1/22/68	5-AB1-152	1/10/69	5-AB1-202	12/ 6/68
5-AB1- 3	7/17/68	5-AB1- 53	1/22/68	5-AB1-103	1/22/68	5-AB1-153	1/22/68	5-AB1-203	7/17/68
5-AB1- 4	7/17/68	5-AB1- 54	1/22/68	5-AB1-104	2/21/68	5-AB1-154	12/ 6/68	5-AB1-204	7/17/68
5-AB1- 5	10/ 9/68	5-AB1- 55	1/22/68	5-AB1-105	9/25/68	5-AB1-155	12/ 6/68	5-AB1-205	7/17/68
5-AB1- 6	1/22/68	5-AB1- 56	7/17/68	5-AB1-106	1/22/68	5-AB1-156	1/22/68	5-AB1-206	3/11/68
5-AB1- 7	11/21/67	5-AB1- 57	7/17/68	5-AB1-107	2/21/68	5-AB1-157	9/15/67	5-AB1-207	8/17/68
5-AB1- 8	1/22/68	5-AB1- 58	3/13/68	5-AB1-108	9/25/68	5-AB1-158	1/22/68	5-AB1-208	2/12/68
5-AB1- 9	10/ 9/68	5-AB1- 59	1/22/68	5-AB1-109	9/25/68	5-AB1-159	12/ 6/68	5-AB1-209	11/27/68
5-AB1- 10	1/22/68	5-AB1- 60	7/17/68	5-AB1-110	3/29/68	5-AB1-160	10/22/68	5-AB1-210	9/27/68
5-AB1- 11	1/22/68	5-AB1- 61	12/ 6/68	5-AB1-111	11/22/68	5-AB1-161	7/17/68	5-AB1-211	1/22/68
5-AB1- 12	1/22/68	5-AB1- 62	1/22/68	5-AB1-112	9/27/68	5-AB1-162	1/10/69	5-AB1-212	1/22/68
5-AB1- 13	12/ 6/68	5-AB1- 63	1/22/68	5-AB1-113	1/22/68	5-AB1-163	11/22/68	5-AB1-213	1/22/68
5-AB1- 14	12/ 6/68	5-AB1- 64	1/22/68	5-AB1-114	12/ 6/68	5-AB1-164	1/22/68	5-AB1-214	1/22/68
5-AB1- 15	1/22/68	5-AB1- 65	1/22/68	5-AB1-115	1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68
5-AB1- 16	1/22/68	5-AB1- 66	1/22/68	5-AB1-116	12/ 6/68	5-AB1-166	11/22/68	5-AB1-216	1/22/68
5-AB1- 17	8/17/68	5-AB1- 67	9/27/68	5-AB1-117	1/22/68	5-AB1-167	12/ 6/68	5-AB1-217	1/22/68
5-AB1- 18	10/ 7/68	5-AB1- 68	1/22/68	5-AB1-118	10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68
5-AB1- 19	12/ 6/68	5-AB1- 69	11/22/68	5-AB1-119	1/10/69	5-AB1-169	12/ 6/68	5-AB1-219	8/17/68
5-AB1- 20	7/17/68	5-AB1- 70	10/ 9/68	5-AB1-120	1/10/69	5-AB1-170	1/22/68	5-AB1-220	9/18/68
5-AB1- 21	12/ 6/68	5-AB1- 71	1/22/68	5-AB1-121	1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	9/18/68
5-AB1- 22	12/ 6/68	5-AB1- 72	9/25/68	5-AB1-122	1/22/68	5-AB1-172	12/ 6/68	5-AB1-222	9/18/68
5-AB1- 23	1/22/68	5-AB1- 73	1/22/68	5-AB1-123	1/22/68	5-AB1-173	12/ 6/68	5-AB1-241	11/27/68
5-AB1- 24	1/22/68	5-AB1- 74	1/22/68	5-AB1-124	1/22/68	5-AB1-174	12/ 6/68	5-AB1-242	1/10/69
5-AB1- 25	1/22/68	5-AB1- 75	1/22/68	5-AB1-125	2/12/68	5-AB1-175	7/17/68		
5-AB1- 26	1/22/68	5-AB1- 76	1/22/68	5-AB1-126	1/22/68	5-AB1-176	1/22/68		
5-AB1- 27	4/17/68	5-AB1- 77	7/17/68	5-AB1-127	1/22/68	5-AB1-177	7/17/68		
5-AB1- 28	1/10/69	5-AB1- 78	12/ 6/68	5-AB1-128	2/12/68	5-AB1-178	7/17/68		
5-AB1- 29	4/17/68	5-AB1- 79	1/22/68	5-AB1-129	2/12/68	5-AB1-179	7/17/68		
5-AB1- 30	4/17/68	5-AB1- 80	1/22/68	5-AB1-130	1/22/68	5-AB1-180	7/20/67		
5-AB1- 31	1/22/68	5-AB1- 81	1/22/68	5-AB1-131	3/13/68	5-AB1-181	12/ 6/68		
5-AB1- 32	9/25/68	5-AB1- 82	1/22/68	5-AB1-132	1/22/68	5-AB1-182	12/ 6/68		
5-AB1- 33	4/17/68	5-AB1- 83	1/22/68	5-AB1-133	7/17/68	5-AB1-183	12/ 6/68		
5-AB1- 34	3/29/68	5-AB1- 84	1/22/68	5-AB1-134	7/17/68	5-AB1-184	12/ 6/68		
5-AB1- 35	1/10/69	5-AB1- 85	1/22/68	5-AB1-135	1/22/68	5-AB1-185	3/11/68		
5-AB1- 36	1/10/69	5-AB1- 86	12/ 6/68	5-AB1-136	11/17/67	5-AB1-186	12/ 6/68		
5-AB1- 37	1/24/68	5-AB1- 87	1/22/68	5-AB1-137	7/17/68	5-AB1-187	3/11/68		
5-AB1- 38	12/ 6/68	5-AB1- 88	1/22/68	5-AB1-138	1/24/68	5-AB1-188	12/ 6/68		
5-AB1- 39	12/ 6/68	5-AB1- 89	7/17/68	5-AB1-139	1/24/68	5-AB1-189	12/ 6/68		
5-AB1- 40	1/24/68	5-AB1- 90	1/22/68	5-AB1-140	11/22/68	5-AB1-190	12/ 6/68		
5-AB1- 41	1/22/68	5-AB1- 91	1/22/68	5-AB1-141	12/ 6/68	5-AB1-191	12/ 6/68		
5-AB1- 42	1/22/68	5-AB1- 92	7/17/68	5-AB1-142	1/24/68	5-AB1-192	12/ 6/68		
5-AB1- 43	1/22/68	5-AB1- 93	1/22/68	5-AB1-143	2/29/68	5-AB1-193	12/ 6/68		
5-AB1- 44	1/24/68	5-AB1- 94	7/17/68	5-AB1-144	9/25/68	5-AB1-194	12/ 6/68		
5-AB1- 45	1/22/68	5-AB1- 95	1/22/68	5-AB1-145	9/25/68	5-AB1-195	12/ 6/68		
5-AB1- 46	11/22/68	5-AB1- 96	1/22/68	5-AB1-146	1/22/68	5-AB1-196	12/ 6/68		
5-AB1- 47	1/22/68	5-AB1- 97	1/22/68	5-AB1-147	1/22/68	5-AB1-197	12/ 6/68		
5-AB1- 48	1/22/68	5-AB1- 98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	12/ 6/68		
5-AB1- 49	1/22/68	5-AB1- 99	1/22/68	5-AB1-149	12/21/67	5-AB1-199	2/ 9/68		

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 1/ 3/69

REVISIONS

5-AB1-	C	1/ 3/69	5-AB1-	50	1/22/68	5-AB1-100	1/22/68	5-AB1-150	12/ 6/68	5-AB1-200	12/ 6/68	
5-AB1-	1	1/22/68	5-AB1-	51	11/22/68	5-AB1-101	7/20/67	5-AB1-151	10/22/68	5-AB1-201	12/ 6/68	
5-AB1-	2	1/22/68	5-AB1-	52	1/22/68	5-AB1-102	1/22/68	5-AB1-152	12/30/68	5-AB1-202	12/ 6/68	
5-AB1-	3	7/17/68	5-AB1-	53	1/22/68	5-AB1-103	1/22/68	5-AB1-153	1/22/68	5-AB1-203	7/17/68	
5-AB1-	4	7/17/68	5-AB1-	54	1/22/68	5-AB1-104	2/21/68	5-AB1-154	12/ 6/68	5-AB1-204	7/17/68	
5-AB1-	5	10/ 9/68	5-AB1-	55	1/22/68	5-AB1-105	9/25/68	5-AB1-155	12/ 6/68	5-AB1-205	7/17/68	
5-AB1-	6	1/22/68	5-AB1-	56	7/17/68	5-AB1-106	1/22/68	5-AB1-156	1/22/68	5-AB1-206	3/11/68	
5-AB1-	7	11/21/67	5-AB1-	57	7/17/68	5-AB1-107	2/21/68	5-AB1-157	9/15/67	5-AB1-207	8/17/68	
5-AB1-	8	1/22/68	5-AB1-	58	3/13/68	5-AB1-108	9/25/68	5-AB1-158	1/22/68	5-AB1-208	2/12/68	
5-AB1-	9	10/ 9/68	5-AB1-	59	1/22/68	5-AB1-109	9/25/68	5-AB1-159	12/ 6/68	5-AB1-209	11/27/68	
5-AB1-	10	1/22/68	5-AB1-	60	7/17/68	5-AB1-110	3/29/68	5-AB1-160	10/22/68	5-AB1-210	9/27/68	
5-AB1-	11	1/22/68	5-AB1-	61	12/ 6/68	5-AB1-111	11/22/68	5-AB1-161	7/17/68	5-AB1-211	1/22/68	
5-AB1-	12	1/22/68	5-AB1-	62	1/22/68	5-AB1-112	9/27/68	5-AB1-162	12/30/68	5-AB1-212	1/22/68	
5-AB1-	13	12/ 6/68	5-AB1-	63	1/22/68	5-AB1-113	1/22/68	5-AB1-163	11/22/68	5-AB1-213	1/22/68	
5-AB1-	14	12/ 6/68	5-AB1-	64	1/22/68	5-AB1-114	12/ 6/68	5-AB1-164	1/22/68	5-AB1-214	1/22/68	
5-AB1-	15	1/22/68	5-AB1-	65	1/22/68	5-AB1-115	1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68	
5-AB1-	16	1/22/68	5-AB1-	66	1/22/68	5-AB1-116	12/ 6/68	5-AB1-166	11/22/68	5-AB1-216	1/22/68	
5-AB1-	17	8/17/68	5-AB1-	67	9/27/68	5-AB1-117	1/22/68	5-AB1-167	12/ 6/68	5-AB1-217	1/22/68	
5-AB1-	18	10/ 7/68	5-AB1-	68	1/22/68	5-AB1-118	10/ 7/68	5-AB1-168	1/22/68	5-AB1-218	12/ 6/68	
5-AB1-	19	12/ 6/68	5-AB1-	69	11/22/68	5-AB1-119	12/30/68	5-AB1-169	12/ 6/68	5-AB1-219	8/17/68	
5-AB1-	20	7/17/68	5-AB1-	70	10/ 9/68	5-AB1-120	12/30/68	5-AB1-170	1/22/68	5-AB1-220	9/18/68	
5-AB1-	21	12/ 6/68	5-AB1-	71	1/22/68	5-AB1-121	1/22/68	5-AB1-171	12/ 6/68	5-AB1-221	9/18/68	
5-AB1-	22	12/ 6/68	5-AB1-	72	9/25/68	5-AB1-122	1/22/68	5-AB1-172	12/ 6/68	5-AB1-222	9/18/68	
5-AB1-	23	1/22/68	5-AB1-	73	1/22/68	5-AB1-123	1/22/68	5-AB1-173	12/ 6/68	5-AB1-241	11/27/68	
5-AB1-	24	1/22/68	5-AB1-	74	1/22/68	5-AB1-124	1/22/68	5-AB1-174	12/ 6/68	5-AB1-242	11/27/68	
5-AB1-	25	1/22/68	5-AB1-	75	1/22/68	5-AB1-125	2/12/68	5-AB1-175	7/17/68			
5-AB1-	26	1/22/68	5-AB1-	76	1/22/68	5-AB1-126	1/22/68	5-AB1-176	1/22/68			
5-AB1-	27	4/17/68	5-AB1-	77	7/17/68	5-AB1-127	1/22/68	5-AB1-177	7/17/68			
5-AB1-	28	12/30/68	5-AB1-	78	12/ 6/68	5-AB1-128	2/12/68	5-AB1-178	7/17/68			
5-AB1-	29	4/17/68	5-AB1-	79	1/22/68	5-AB1-129	2/12/68	5-AB1-179	7/17/68			
5-AB1-	30	4/17/68	5-AB1-	80	1/22/68	5-AB1-130	1/22/68	5-AB1-180	7/20/67			
5-AB1-	31	1/22/68	5-AB1-	81	1/22/68	5-AB1-131	3/13/68	5-AB1-181	12/ 6/68			
5-AB1-	32	9/25/68	5-AB1-	82	1/22/68	5-AB1-132	1/22/68	5-AB1-182	12/ 6/68			
5-AB1-	33	4/17/68	5-AB1-	83	1/22/68	5-AB1-133	7/17/68	5-AB1-183	12/ 6/68			
5-AB1-	34	2/29/68	5-AB1-	84	1/22/68	5-AB1-134	7/17/68	5-AB1-184	12/ 6/68			
5-AB1-	35	12/30/68	5-AB1-	85	1/22/68	5-AB1-135	1/22/68	5-AB1-185	3/11/68			
5-AB1-	36	12/30/68	5-AB1-	86	12/ 6/68	5-AB1-136	11/17/67	5-AB1-186	12/ 6/68			
5-AB1-	37	1/24/68	5-AB1-	87	1/22/68	5-AB1-137	7/17/68	5-AB1-187	3/11/68			
5-AB1-	38	12/ 6/68	5-AB1-	88	1/22/68	5-AB1-138	1/24/68	5-AB1-188	12/ 6/68			
5-AB1-	39	12/ 6/68	5-AB1-	89	7/17/68	5-AB1-139	1/24/68	5-AB1-189	12/ 6/68			
5-AB1-	40	1/24/68	5-AB1-	90	1/22/68	5-AB1-140	11/22/68	5-AB1-190	12/ 6/68			
5-AB1-	41	1/22/68	5-AB1-	91	1/22/68	5-AB1-141	12/ 6/68	5-AB1-191	12/ 6/68			
5-AB1-	42	1/22/68	5-AB1-	92	7/17/68	5-AB1-142	1/24/68	5-AB1-192	12/ 6/68			
5-AB1-	43	1/22/68	5-AB1-	93	1/22/68	5-AB1-143	2/29/68	5-AB1-193	12/ 6/68			
5-AB1-	44	1/24/68	5-AB1-	94	7/17/68	5-AB1-144	9/25/68	5-AB1-194	12/ 6/68			
5-AB1-	45	1/22/68	5-AB1-	95	1/22/68	5-AB1-145	9/25/68	5-AB1-195	12/ 6/68			
5-AB1-	46	11/22/68	5-AB1-	96	1/22/68	5-AB1-146	1/22/68	5-AB1-196	12/ 6/68			
5-AB1-	47	1/22/68	5-AB1-	97	1/22/68	5-AB1-147	1/22/68	5-AB1-197	12/ 6/68			
5-AB1-	48	1/22/68	5-AB1-	98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	12/ 6/68			
							12/21/67	5-AB1-199	2/ 9/68			

LICENSED PROFESSIONAL ENGINEER ☆ LESLIE E. ROBERTSON ☆ No. 34360 UNIVERSITY OF THE STATE OF NEW YORK

SKILLING-HELLE-CHRISTIANSEN-ROBERTSON — Civil & Structural Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 5/ 7/68

REVISIONS

5-AB1-	0	11/ 9/67	5-AB1-	50	1/22/68	5-AB1-100	1/22/68	5-AB1-150	1/22/68	5-AB1-200	2/ 9/68
5-AB1-	1	1/22/68	5-AB1-	51	1/22/68	5-AB1-101	7/20/67	5-AB1-151	1/22/68	5-AB1-201	3/11/68
5-AB1-	2	1/22/68	5-AB1-	52	1/22/68	5-AB1-102	1/22/68	5-AB1-152	1/22/68	5-AB1-202	2/12/68
5-AB1-	3	1/22/68	5-AB1-	53	1/22/68	5-AB1-103	1/22/68	5-AB1-153	1/22/68	5-AB1-203	2/ 9/68
5-AB1-	4	1/22/68	5-AB1-	54	1/22/68	5-AB1-104	2/21/68	5-AB1-154	1/22/68	5-AB1-204	2/ 9/68
5-AB1-	5	1/22/68	5-AB1-	55	1/22/68	5-AB1-105	1/22/68	5-AB1-155	3/29/68	5-AB1-205	3/11/68
5-AB1-	6	1/22/68	5-AB1-	56	1/22/68	5-AB1-106	1/22/68	5-AB1-156	1/22/68	5-AB1-206	3/11/68
5-AB1-	7	11/21/67	5-AB1-	57	4/17/68	5-AB1-107	2/21/68	5-AB1-157	9/15/67	5-AB1-207	2/12/68
5-AB1-	8	1/22/68	5-AB1-	58	3/13/68	5-AB1-108	1/22/68	5-AB1-158	1/22/68	5-AB1-208	2/12/68
5-AB1-	9	1/22/68	5-AB1-	59	1/22/68	5-AB1-109	2/21/68	5-AB1-159	1/22/68	5-AB1-209	1/24/68
5-AB1-	10	1/22/68	5-AB1-	60	1/22/68	5-AB1-110	3/29/68	5-AB1-160	1/22/68	5-AB1-210	1/22/68
5-AB1-	11	1/22/68	5-AB1-	61	1/22/68	5-AB1-111	1/22/68	5-AB1-161	1/22/68	5-AB1-211	1/22/68
5-AB1-	12	1/22/68	5-AB1-	62	1/22/68	5-AB1-112	1/22/68	5-AB1-162	4/17/68	5-AB1-212	1/22/68
5-AB1-	13	11/21/67	5-AB1-	63	1/22/68	5-AB1-113	1/22/68	5-AB1-163	1/22/68	5-AB1-213	1/22/68
5-AB1-	14	1/22/68	5-AB1-	64	1/22/68	5-AB1-114	2/12/68	5-AB1-164	1/22/68	5-AB1-214	1/22/68
5-AB1-	15	1/22/68	5-AB1-	65	1/22/68	5-AB1-115	1/22/68	5-AB1-165	1/24/68	5-AB1-215	1/22/68
5-AB1-	16	1/22/68	5-AB1-	66	1/22/68	5-AB1-116	1/22/68	5-AB1-166	2/12/68	5-AB1-216	1/22/68
5-AB1-	17	1/22/68	5-AB1-	67	1/22/68	5-AB1-117	1/22/68	5-AB1-167	1/22/68	5-AB1-217	1/22/68
5-AB1-	18	1/22/68	5-AB1-	68	1/22/68	5-AB1-118	1/22/68	5-AB1-168	1/22/68	5-AB1-218	5/ 7/68
5-AB1-	19	1/22/68	5-AB1-	69	1/22/68	5-AB1-119	2/12/68	5-AB1-169	1/22/68	5-AB1-241	10/ 5/67
5-AB1-	20	1/22/68	5-AB1-	70	1/22/68	5-AB1-120	2/12/68	5-AB1-170	1/22/68		
5-AB1-	21	1/22/68	5-AB1-	71	1/22/68	5-AB1-121	1/22/68	5-AB1-171	1/22/68		
5-AB1-	22	1/22/68	5-AB1-	72	1/22/68	5-AB1-122	1/22/68	5-AB1-172	1/22/68		
5-AB1-	23	1/22/68	5-AB1-	73	1/22/68	5-AB1-123	1/22/68	5-AB1-173	1/22/68		
5-AB1-	24	1/22/68	5-AB1-	74	1/22/68	5-AB1-124	1/22/68	5-AB1-174	1/22/68		
5-AB1-	25	1/22/68	5-AB1-	75	1/22/68	5-AB1-125	2/12/68	5-AB1-175	1/22/68		
5-AB1-	26	1/22/68	5-AB1-	76	1/22/68	5-AB1-126	1/22/68	5-AB1-176	1/22/68		
5-AB1-	27	4/17/68	5-AB1-	77	1/22/68	5-AB1-127	1/22/68	5-AB1-177	1/22/68		
5-AB1-	28	1/24/68	5-AB1-	78	1/22/68	5-AB1-128	2/12/68	5-AB1-178	1/22/68		
5-AB1-	29	4/17/68	5-AB1-	79	1/22/68	5-AB1-129	2/12/68	5-AB1-179	1/22/68		
5-AB1-	30	4/17/68	5-AB1-	80	1/22/68	5-AB1-130	1/22/68	5-AB1-180	7/20/67		
5-AB1-	31	1/22/68	5-AB1-	81	1/22/68	5-AB1-131	3/13/68	5-AB1-181	3/11/68		
5-AB1-	32	1/22/68	5-AB1-	82	1/22/68	5-AB1-132	1/22/68	5-AB1-182	3/11/68		
5-AB1-	33	4/17/68	5-AB1-	83	1/22/68	5-AB1-133	1/22/68	5-AB1-183	5/ 7/68		
5-AB1-	34	3/29/68	5-AB1-	84	1/22/68	5-AB1-134	9/15/67	5-AB1-184	5/ 7/68		
5-AB1-	35	1/24/68	5-AB1-	85	1/22/68	5-AB1-135	1/22/68	5-AB1-185	3/11/68		
5-AB1-	36	1/24/68	5-AB1-	86	1/22/68	5-AB1-136	11/17/67	5-AB1-186	2/ 9/68		
5-AB1-	37	1/24/68	5-AB1-	87	1/22/68	5-AB1-137	9/15/67	5-AB1-187	3/11/68		
5-AB1-	38	1/22/68	5-AB1-	88	1/22/68	5-AB1-138	1/24/68	5-AB1-188	2/ 9/68		
5-AB1-	39	1/22/68	5-AB1-	89	3/13/68	5-AB1-139	1/24/68	5-AB1-189	5/ 7/68		
5-AB1-	40	1/24/68	5-AB1-	90	1/22/68	5-AB1-140	1/24/68	5-AB1-190	5/ 7/68		
5-AB1-	41	1/22/68	5-AB1-	91	1/22/68	5-AB1-141	1/22/68	5-AB1-191	2/ 9/68		
5-AB1-	42	1/22/68	5-AB1-	92	3/13/68	5-AB1-142	1/24/68	5-AB1-192	2/ 9/68		
5-AB1-	43	1/22/68	5-AB1-	93	1/22/68	5-AB1-143	2/29/68	5-AB1-193	3/11/68		
5-AB1-	44	1/24/68	5-AB1-	94	1/22/68	5-AB1-144	2/21/68	5-AB1-194	5/ 7/68		
5-AB1-	45	1/22/68	5-AB1-	95	1/22/68	5-AB1-145	2/21/68	5-AB1-195	5/ 7/68		
5-AB1-	46	1/22/68	5-AB1-	96	1/22/68	5-AB1-146	1/22/68	5-AB1-196	3/11/68		
5-AB1-	47	1/22/68	5-AB1-	97	1/22/68	5-AB1-147	1/22/68	5-AB1-197	3/11/68		
5-AB1-	48	1/22/68	5-AB1-	98	1/22/68	5-AB1-148	1/22/68	5-AB1-198	3/11/68		
5-AB1-	49	1/22/68	5-AB1-	99	1/22/68	5-AB1-149	12/21/67	5-AB1-199	2/ 9/68		

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 8440 — DISTRICT OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	11/26/71

REVISIONS

5-AB2- 1	5/ 1/69		
5-AB2- 2	11/21/67	5-AB3- 1	5/ 1/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
5-AB2-12.4	11/21/67		
5-AB2-12.5	11/21/67		
5-AB2-12.6	11/21/67		
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5-AB2-16	11/21/67		
5-AB2-17	11/21/67		
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5-AB2-19	11/21/67		
5-AB2-20	9/15/67		
5-AB2-21	11/21/67		
5-AB2-22	11/22/67		
5-AB2-23	7/17/68		
5-AB2-24	11/17/67		
5-AB2-25	12/21/67		
5-AB2-26	10/31/67		
5-AB2-27	7/14/67		
5-AB2-28	12/21/67		
5-AB2-29	12/21/67		
5-AB2-30	12/21/67		
5-AB2-31	3/29/68		
5-AB2-32	12/21/67		
5-AB2-33	12/21/67		
5-AB2-34	11/21/67		
5-AB2-35	11/21/67		
5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers — Printed

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	10/ 1/69

REVISIONS

5-AB2- 1	5/ 1/69		
5-AB2- 2	11/21/67	5-AB3- 1	5/ 1/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
5-AB2-12.4	11/21/67		
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5-AB2-23	7/17/68		
5-AB2-24	11/17/67		
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5-AB2-30	12/21/67		
5-AB2-31	3/29/68		
5-AB2-32	12/21/67		
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5-AB2-34	11/21/67		
5-AB2-35	11/21/67		
5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers — Printed

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 9/ 2/69

REVISIONS

5-AB2- 1	5/ 1/69		
5-AB2- 2	11/21/67	5-AB3- 1	5/ 1/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
5-AB2-12.4	11/21/67		
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5-AB2-31	3/29/68		
5-AB2-32	12/21/67		
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5-AB2-35	11/21/67		
5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

SKILLING-HELLE-CHRISTIANSEN-ROBERTSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	7/ 1/69

REVISIONS

5-AB2- 1	5/ 1/69	5-AB3- 1	5/ 1/69
5-AB2- 2	11/21/67	5-AB3- 2	12/ 6/68
5-AB2- 2.1	10/15/67	5-AB3- 3	12/21/67
5-AB2- 3	HOLD	5-AB3- 4	11/ 9/67
5-AB2- 4	12/21/67	5-AB3- 5	12/21/67
5-AB2- 5	HOLD		
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
5-AB2-12.4	11/21/67		
5-AB2-12.5	11/21/67		
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5-AB2-23	7/17/68		
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5-AB2-31	3/29/68		
5-AB2-32	12/21/67		
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5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

LICENSED PROFESSIONAL ENGINEER
LESLIE E. ROBERTSON
No. 34360
UNIVERSITY OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	4/ 1/69

REVISIONS

lated 5-1-69

5-AB2- 1	4/ 1/69		
5-AB2- 2	11/21/67	5-AB3- 1	4/ 1/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
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5-AB2-22	11/22/67		
5-AB2-23	7/17/68		
5-AB2-24	11/17/67		
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5-AB2-26	10/31/67		
5-AB2-27	7/14/67		
5-AB2-28	12/21/67		
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5-AB2-30	12/21/67		
5-AB2-31	3/29/68		
5-AB2-32	12/21/67		
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5-AB2-34	11/21/67		
5-AB2-35	11/21/67		
5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

REGISTERED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 3436 — STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	4/ 1/69

REVISIONS

5-AB2- 1	4/ 1/69		
5-AB2- 2	11/21/67	5-AB3- 1	4/ 1/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
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5-AB2-23	7/17/68		
5-AB2-24	11/17/67		
5-AB2-25	12/21/67		
5-AB2-26	10/31/67		
5-AB2-27	7/14/67		
5-AB2-28	12/21/67		
5-AB2-29	12/21/67		
5-AB2-30	12/21/67		
5-AB2-31	3/29/60		
5-AB2-32	12/21/67		
5-AB2-33	12/21/67		
5-AB2-34	11/21/67		
5-AB2-35	11/21/67		
5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	THE WORLD TRADE CENTER	TITLE	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	DATE	3/ 3/69

REVISIONS

5-AB2- 1	3/ 3/69		
5-AB2- 2	11/21/67	5-AB3- 1	3/ 3/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
5-AB2-10	11/21/67		
5-AB2-11	11/21/67		
5-AB2-11.1	1/10/69		
5-AB2-12	11/21/67		
5-AB2-12.1	12/21/67		
5-AB2-12.2	11/21/67		
5-AB2-12.3	11/22/68		
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5-AB2-31	3/29/68		
5-AB2-32	12/21/67		
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5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
THE WORLD TRADE CENTER	DRAWING BOOK 5 - BEAM SCHEDULE & TYPES	2/ 3/69

REVISIONS

5-AB2- 1	2/ 3/69		
5-AB2- 2	11/21/67	5-AB3- 1	2/ 3/69
5-AB2- 2.1	10/15/67	5-AB3- 2	12/ 6/68
5-AB2- 3	HOLD	5-AB3- 3	12/21/67
5-AB2- 4	12/21/67	5-AB3- 4	11/ 9/67
5-AB2- 5	HOLD	5-AB3- 5	12/21/67
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
5-AB2- 9	10/31/67		
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5-AB2-38	9/25/68		
5-AB2-39	5/ 7/68		
5-AB2-40	9/25/68		

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: DRAWING BOOK 5 - BEAM SCHEDULE & TYPES | DATE: 1/ 3/69

REVISIONS

5-AB2- 1	1/ 3/69	5-AB3- 1	1/ 3/69
5-AB2- 2	11/21/67	5-AB3- 2	12/ 6/68
5-AB2- 2.1	10/15/67	5-AB3- 3	12/21/67
5-AB2- 3	HOLD	5-AB3- 4	11/ 9/67
5-AB2- 4	12/21/67	5-AB3- 5	12/21/67
5-AB2- 5	HOLD		
5-AB2- 6	7/17/68		
5-AB2- 7	11/15/67		
5-AB2- 8	HOLD		
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5-AB2-36	11/21/67		
5-AB2-37	11/21/67		
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SKILLING-HELLE-CHRISTIANSEN-ROBERTSON — Civil & Structural Engineers

PROJECT	TITLE	DATE
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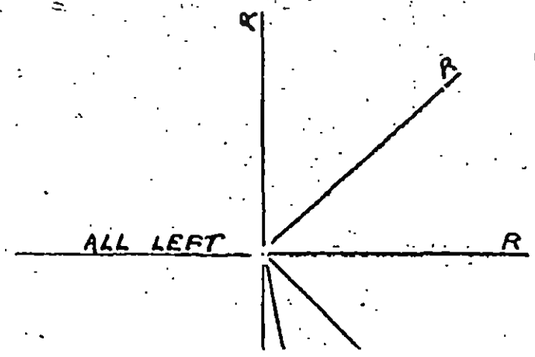
PROJECT: THE WORLD TRADE CENTER | TITLE: BEAM SCHEDULE TOWERS A AND B | DATE: 11/ 9/67

REVISIONS

BEAM NO.	SIZE	TYPE	FY	SHAPE	PLATE 1 WIDTH	PLATE 1 THICK	PLATE 2 WIDTH	PLATE 2 THICK	DIMENSIONS LENGTH	DIMENSIONS DIM. A	SUPPORTS LEFT	SUPPORTS RIGHT	STUDS NO.	STUDS SIZE	REMARKS
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)

(1) BEAM IDENTIFICATION NUMBER, SHOWN ON FRAMING PLAN
(2) NOMINAL DIMENSIONS OF BEAM IF NOT STANDARD ROLLED SHAPE
(3) BEAM TYPE, SEE 5-AB2
(4) REQUIRED YIELD STRENGTH OF STEEL
(5) DESIGNATION OF ROLLED SHAPE, WHERE APPLICABLE
(6) WIDTH OF FLANGE OF BUILT UP BEAM, OR WIDTH OF COVER PLATE ON ROLLED SECTION, SEE BEAM TYPE
(7) THICKNESS OF FLANGE OF BUILT UP BEAM OR THICKNESS OF COVER PLATE ON ROLLED SECTION, SEE BEAM TYPE
(8) DEPTH OF WEB PLATE(S) OF BUILT UP SECTION
(9) THICKNESS OF WEB PLATE(S) OF BUILT UP SECTION
(10) LENGTH OF COVER PLATE(S)
(11) DISTANCE FROM LEFT END OF BEAM TO LEFT END OF COVER PLATE
(12) SUPPORT DETAIL LEFT END OF BEAM, GIVEN AS SUPPORT DETAIL NUMBER OR AS REACTION IN KIPS FOR STANDARD AISC CONNECTION. FOR DETAILS SEE 6-AB1 AND 6-AB2
(13) SAME AS (12) BUT FOR RIGHT END OF BEAM
(14) NUMBER OF SHEAR CONNECTORS ON BEAM
(15) SIZE OF SHEAR CONNECTORS (DIAM. X LENGTH) AND PLACEMENT DETAILS (SEE 5-AB3)
(16) REMARKS. NUMBERS REFER TO NOTES AT FOOT OF PAGE

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34350 — UNIVERSITY OF THE STATE OF NEW YORK



CONVENTION FOR DETERMINING LEFT AND RIGHT ENDS OF BEAMS

(1) ALL BEAMS EXCEPT THOSE ON VERTICAL AXIS OF SHEET HAVE THE END NEAREST TO THE LEFT SIDE OF THE SHEET DESIGNATED AS LEFT

(2) ALL BEAMS ON VERTICAL AXIS HAVE THE END NEAREST TO THE BOTTOM OF THE SHEET

SKIL[illegible]LE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: BEAM TYPES - INDEX & NOTES | DATE: 4/ 1/69

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5-AB2- 7 BEAM TYPE 301
5-AB2- 8 NOT USED
5-AB2- 9 BEAM TYPE 305, 306, 307
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NOTES

1. SEE 5-AB1 FOR BEAM SCHEDULE
2. BEAM TYPE 100 IS A ROLLED SHAPE
3. BEAM TYPE 600 IS A RECTANGULAR SEAMLESS STRUCTURAL TUBING AND SHALL CONFORM TO ASTM A501.

LICENSED PROFESSIONAL ENGINEER — LESLIE E. ROBERTSON — No. 34360 — UNIVERSITY OF THE STATE OF NEW YORK

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

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5-AB2-40 BEAM TYPE 469

NOTES

1. SEE 5-A01 FOR BEAM SCHEDULE
2. BEAM TYPE 100 IS A ROLLED SHAPE
3. BEAM TYPE 600 IS A RECTANGULAR SEAMLESS STRUCTURAL TUBING AND SHALL CONFORM TO ASTM A501.

SKILLING, HELLE, CHRISTIANSEN, ROBERTSON — Structural & Civil Engineers

PROJECT	TITLE	DATE
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5-AB2-40 BEAM TYPE 469

NOTES

1. SEE 5-AB1 FOR BEAM SCHEDULE
2. BEAM TYPE 100 IS A ROLLED SHAPE
3. BEAM TYPE 600 IS A RECTANGULAR SEAMLESS STRUCTURAL TUBING AND SHALL CONFORM TO ASTM A501.

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PROJECT	TITLE	DATE
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5-AB2-40 BEAM TYPE 469

NOTES

1. SEE 5-AB1 FOR BEAM SCHEDULE
2. BEAM TYPE 100 IS A ROLLED SHAPE
3. BEAM TYPE 600 IS A RECTANGULAR SEAMLESS STRUCTURAL TUBING AND SHALL CONFORM TO ASTM A501.

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SKILLING · HELLE · CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: BEAM TYPES - NOTES & INDEX | DATE: 5-1-67

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NOTES

1. See 5-AB1 for beam schedule
2. Beam type 100 is a rolled shape.
3. Beam type 600 is a rectangular seamless structural tubing and shall conform to ASTM A501.

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LICENSED PROFESSIONAL ENGR. LESLIE E. ROBERTSON No. 32363 STATE OF NEW YORK

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PROJECT THE WORLD TRADE CENTER | TITLE BEAM TYPES - NOTES & INDEX | DATE 5-1-67

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NOTES

1. See 5-AB1 for beam schedule
2. Beam type 100 is a rolled shape.
3. Beam type 600 is a rectangular seamless structural tubing and shall conform to ASTM A501.

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REGISTERED PROFESSIONAL ENGINEER LESLIE E. ROBERTSON No. 3[illegible] UNIVERSITY OF ILLINOIS

SKILLING - HELLE - CHRISTIANSEN - ROBERTSON — Structural & Civil Engineers

PROJECT: THE WORLD TRADE CENTER | TITLE: STUDS-INDEX & GENERAL NOTES | DATE: 11-9-67

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5-AB3-5	Studs - Standard placement

General Notes

1. Studs shall be manufactured from A.I.S.I. grade C1015, C1017 or C1020 steel conforming to the requirements of A.S.T.M. A108.
2. Studs shall be applied by using a stud welding system providing a minimum current of 2000 amperes.
3. See beam elevations 6-AB8 for studs on perimeter core beams.

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PROJECT THE WORLD TRADE CENTER | TITLE STUDS-INDEX & GENERAL NOTES | DATE 11-9-67

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5-AB3-3 Studs - Standard placement.
5-AB3-4 Studs - Standard placement.
5-AB3-5 Studs - Standard placement.

General Notes

1. Studs shall be manufactured from AISI grade C1015, C1017 or C1020 steel conforming to the requirements of ASTM A108.
2. Studs shall be applied by using a stud welding system providing a minimum current of 2000 amperes.
3. See beam elevations 6-AB8 for studs on perimeter core beams.

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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

PROJECT THE WORLD TRADE CENTER | TITLE STUDS-INDEX & GENERAL NOTES | DATE 11-9-67

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5-AB3-3 Studs - Standard placement.
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5-AB3-5 Studs - Standard placement.

General Notes

1. Studs shall be manufactured from AISI grade C1015, C1017 or C1020 steel conforming to the requirements of ASTM A108.
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SKILLING - HELLE - CHRISTIANSEN - ROBERTSON Structural & Civil Engineers

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5-AB3-4	Studs - Standard placement.
5-AB3-5	Studs - Standard placement.

General Notes

1. Studs shall be manufactured from AISI grade C1015, C1017 or C1020 steel conforming to the requirements of ASTM A108.
2. Studs shall be applied by using a stud welding system providing a minimum current of 2000 amperes.
3. See beam elevations 6-AB8 for studs on perimeter core beams.

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S-AB3-3	Studs - Standard placement.
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